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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/965,437	09/27/2001	Johnny M. Matta	10745/022	3877

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EXAMINER

RAMAKRISHNAIAH, MELUR

ART UNIT PAPER NUMBER

2614

DATE MAILED: 05/26/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/965,437

Applicant(s)

MATTA ET AL.

Examiner

Melur Ramakrishnaiah

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 28 February 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-26 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-26 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>2-11-02/8-29-05</u> | 6) <input type="checkbox"/> Other: _____ |

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 1-3, 6-7, 8-10, 11-13, 16-17, 18-19, 22-23 are rejected under 35 U.S.C 102(e) as being anticipated by Chaskar et al. (US2004/0196808A1, filed 6-28-2001, hereinafter Chaskar).

Regarding claim 1, Chaskar discloses a method for providing a triggering mechanism in an all-ip wireless communication system, comprising: probing a plurality of end-to-end communication paths between a mobile terminal (MT, fig. 3) and a correspondent node (not shown) to obtain at least one QoS parameter associated with each of the communication path , identifying each of the communication path that provides predefined acceptable level of performance and generating a handoff trigger to the communication path that provides highest level of performance to the mobile terminal (fig. 3, paragraphs: 0023 – 0032; fig. 5 paragraphs: 0038-0039).

Regarding claim 11, Chaskar discloses a method for providing a triggering mechanism in an all-ip wireless communication system, comprising: establishing a plurality of end-to-end communication paths between a mobile terminal (MT, fig. 1) and a corresponding node (this step is implicit in as much as the reference teaches storing

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capability information such as QoS in access routers as shown in fig 3), obtaining at least one QoS parameter (304, fig. 3) for each end to end communication path, identifying each the end-to-end to communication path that satisfies a predetermined acceptable level of performance, and generating a handoff to the end-to-end communication path that provides the highest QoS to the mobile terminal (fig. 3, paragraphs: 0023 – 0032; fig. 5 paragraphs: 0038-0039).

Regarding claim 18, Chaskar discloses a method for providing a triggering mechanism in an all-ip wireless communication system, comprising the steps of: providing a mobile terminal connected to plurality of AP/R pairs (AR1 ... AR4, fig. 3) obtaining for each pair AP/R pair at least one QoS parameter that is defined by an end-to-end communication path between the mobile terminal and correspondent node (not shown), identifying each AP/R pair that passes a predefined QoS requirement associated with QoS parameter, ranking the AP/R pairs according to a predefined level of performance using the at least one QoS parameter (this step is implicit as the mobile receives capability information from ARs, paragraph: 0039), generating a handoff trigger directing the mobile terminal to handoff to the AP/R pair providing a highest QoS to the mobile terminal ((fig. 3, paragraphs: 0023 – 0032; fig. 5 paragraphs: 0038-0039).

Regarding claims 2-3, 6-7, 8-10, 12-13, 16-17, 19, 22-23, Chaskar further teaches the following: at least one QoS parameter is selected from a group of QoS parameters consisting of packet delay, packet jitter, packet loss and bandwidth (paragraphs: 0028, 0041), step of ranking the communication path according to a predicted level of performance (this step is implicit as the mobile receives capability information from ARs,

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paragraph: 0039), correspondent node comprises a fixed terminal/mobile terminal (paragraph: 0023), step of considering a cost factor (paragraph: 0046), user preference setting on the mobile terminal (paragraph: 0032), step of considering load balancing on the all-IP wireless communication system (paragraph: 0040).

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 4, 14, 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Chaskar in view of Gibson (US PAT: 6,678,264, filed 6-30-1999).

Chaskar differs from claims 4, 14, and 20 in that he does not teach the following: ranking step uses a weighted based ranking.

However, Gibson discloses establishing connections with a pre-specified quality of service across a communication network which teaches the following: ranking step uses a weighted based ranking (col. 19, line 63-col. 20, line 2).

Thus, it would have been obvious to one of ordinary skill in the art at the time invention was made to modify Chaskar's system to provide for the following: ranking step uses a weighted based ranking as this arrangement would provide stronger criteria for ranking the communications paths as taught by Gibson, thus providing stable basis for ranking.

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5. Claims 5, 15, 21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Chaskar in view of Hui et al. (US PAT: 5,991,634, hereinafter Hui).

Chaskar differs from claims 5, 15, 21 in that he does not teach the following: ranking step uses perception based ranking.

However, Hui discloses plug and play telephone system which teaches the following: ranking step uses perception based ranking (reads on quality ranking of voice channels, claim 1).

Thus, it would have been obvious to one of ordinary skill in the art at the time invention was made to modify Chaskar's system to provide for the following: ranking step uses perception based ranking as this arrangement would provide another criteria for ranking communication channels as taught by Hui.

6. Claims 24-26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Chaskar in view of Masuda et al. (US PAT: 6,314,098, hereinafter Masuda).

Chaskar differs from claims 24-26 in that he does not specifically teach the a layer 3 QoS evaluation parameter corresponding to each the end-to-end communication path.

However, Masuda discloses ATM connectionless communication system which teaches the following: declaring quality of service (QoS) in layer 3 or more (col. 4 lines 51-53) which implies layer 3 QoS evaluation parameter corresponding to each the end-to-end communication path.

Thus, it would have been obvious to one of ordinary skill in the art at the time invention was made to modify Chaskar's system to provide for the following: layer 3

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QoS evaluation parameter corresponding to each the end-to-end communication path as this arrangement would provide to effect bandwidth guarantee QOS as taught by Masuda.

Response to Arguments

7. Applicant's arguments filed on 2-28-2006 have been fully considered but they are not persuasive.

8. Rejection of claims 1-3, 6-7, 8-10, 11-13, 16-17, 18-19, 22-23 under 35 U.S.C 102(e) as being anticipated by Chaskar et al. (US2004/0196808A1, filed 6-28-2001, hereinafter Chaskar): regarding rejection of claims, for example independent claim 1, Applicant argues that " The QoS parameters described in Chaskar are part of static capabilities. This implies that they would not dynamically change with the new mobile terminal. In other words, there is no implication that information is associated with the mobile terminal itself since the QoS information ... Therefore, those capabilities do not include that impact of wireless link between mobile terminal and access router itself. That is, in such a case, the QoS parameters would not be based on the communication on the entire communication link between the terminal and correspondent node". Contrary to applicant's interpretation of Chaskar's reference, Chaskar teaches a following scenario: suppose that the user of the mobile terminal MT is watching a movie over an IP connection requiring a connection bandwidth of 256 kilobytes per second. Suppose further that terminal MT is about to move from an access router that supports such a bandwidth to an area served by two access routers AR2 and AR4. The movement detection scheme allows AR1 to know that AR2 and AR4 can cover MT after

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it moves out of service area SAL. Selector function 302 in access router AR1 consults capability map 304 and determines that of two access routers in the area only AR4 supports such a bandwidth. Thereafter, AR1 arranges handoffs between the mobile terminal MT and access router AR4 (paragraph: 0030). This clearly reads on applicants claim limitation such as the QoS parameters would be based on the communication on the entire communication link between the terminal and correspondent node because the references teaches mobile terminal MT which is watching a movie over an IP connection requiring a connection bandwidth of 256 kilobytes per second which includes bandwidth requirements between the mobile and access router is handed over to another router/node capable of providing the same bandwidth as the original router/or node. Therefore rejection of claims is maintained.

Applicant further argues about Chaskar such as making decisions on the basis of signal strength and previously stored capability requirements or profile which are layer 2 QoS parameters that are used to measure a wireless link and are not used to cover the path to the correspondent node in its entirety. Be that as it may, as explained above, Chaskar teaches maintaining required bandwidth (QoS) which includes end-to-end path between the mobile terminal MT and router and source of data for the mobile terminal.

Applicants arguments with respect to dependent claims 4, 14, 20 and 5, 15, 21 rejected under 35 U.S.C 103(a) is geared towards independent claims being patentable which are not as explained above because Chaskar teaches the limitations of independent claims.

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9. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

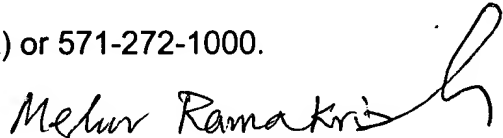
A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Melur Ramakrishnaiah whose telephone number is (571)272-8098. The examiner can normally be reached on 9 Hr schedule.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Curt Kuntz can be reached on (571) 272-7499. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.


Melur Ramakrishnaiah
Primary Examiner
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